FIELD MARGINS TO HALT THE LOSS AND REVERSE THE DECLINE OF BIODIVERSITY

<u>Pollinators Network initiative</u> (PNi) is one of the projects supported by the <u>European Land Owners ELO</u>, together with <u>Syngenta</u>, in order to halt the loss and reverse the decline of biodiversity by encouraging and support its members to create habitats for pollinating insects.

PNi is a network of farmers and land managers acting for biodiversity willing to use field margins as a bed of plants as their field border which are particularly adept for pollination species. These strips are also considered as excellent habitat and a source of food for birds, small game and roe deer.



The benefits of the project include management practices and advisory tools as part of an integrated solution. Among the main objectives is the inclusion of hedges (consisting of woody species), and grass and flower strips, specifically targeted for pollinators and referred to as *pollinators strips* with dedicated crops for biodiversity. All these forms of field margins, which can be implemented in combination, can improve the habitat for biodiversity as they offer shelter, food, nesting ground, breeding grounds and natural corridors. Establishing field strips between arable land and bodies has proven to reduce the negative effect of soil erosion and water pollution. In addition, they also reduce the unwanted drift-off effect when applying plant protection products.

In particular, Field margins have the potential to provide the following benefits for agri-businesses and environment:

- Season-long bloom and diversity of flower mixes will provide constant food source for insects, for birds and small mammals
- Reintroduction of local plant species
- Boost the number of pollinating and beneficial insects
- Increase earthworm populations and activity
- Protect watercourses and ponds from runoff
- Improve the efficiency of water use by crops
- Decrease flooding by slowing down the transfer of precipitation to surface water
- Prevent the loss of soil
- Prevent aquatic environment contamination by sediment from adjacent fields
- Increase the resilience of agro-ecological systems to climate change.





There are many ways which a farmer can implement field margins in practice. ELO and Syngenta have cooperated to train farmers and provide useful information on how to implement these measures. In the brochure published by Syngenta <u>The importance of field margins</u> available in the PNi website, more information about these methodologies and the importance of its use is available.

To date, the PNi is present in over 16 countries of the European Union: Spain, UK, Italy, Portugal, Czech Republic, Belgium, France, Germany, Hungary, Lithuania, Austria, Netherlands, Finland, Sweden, Slovakia and Greece. From 2010 to 2012, the network reached about 10,000 hectares of pollinators strips implemented in Europe.

More than a third of the world's agricultural crops depend on pollination provided by bees and other pollinating insects that have been falling in many countries due to the unsustainable intensive farming way adopted. The methodologies of Filed Margins have today a strategic role to rebuild the habitat for the pollinating insects in the areas dedicated to intensive agricultural production. Field margins will increase the number of species present in the field and can balance the biodiversity within the agricultural landscape as a whole. The Pollinator Network promotes greening practices showing that sustainability and modern farming can coexist.



To know more

PNi website

Syngenta website

Pollinators in FAO website

Pollination in FAO website

Article in conservationevidence.com

Article in sciencedirect.com

Article in journals.plos.org

Article in lancaster.ac.uk

ELO members links

Syngenta Annual Report